

Mr. Richard Lyons
Freesen, Inc.
P.O. Box 350
Bluffs, IL 62621

Re: AAF 171-12842
First Administrative Amendment to
FESOP 171-9683, Plt ID 171-05052

Dear Mr. Richard Lyons:

Freesen, Inc., was issued a FESOP on August 10, 1998, for a portable 334 ton per hour drum-mix hot asphalt manufacturing plant. A letter requesting a modification to the description of fuel used for aggregate dryer was received on October 17, 2000. Pursuant to the provisions of 326 IAC 2-8-10 the permit is hereby administratively amended as follows (with text added in **bold** and deleted in ~~strikeout~~):

1. The company has requested that they be allowed to combust On-Spec blended recycled fuel oil (meeting the specification of **#4** fuel oil) for their aggregate drying operation.

The OAM, IDEM has determined that the On-Spec blended recycled fuel oil meets the specification of **#4** fuel oil. Therefore, the permit is hereby amended as follows to allow combustion of this fuel in their aggregate drying unit. This change will not have any effect on the potential to emit of criteria pollutants from this source.

The condition A.2 (1) and D.1 (1) are amended as follows:

- (1) one (1) portable hot asphalt mixer and aggregate dryer, with a maximum capacity of 350 tons per hour, equipped with one (1) **#4** fuel oil **or on-spec recycled blended fuel oil (meeting specifications of #4 fuel oil)** fired burner with a rated input of 120 million (MM) Btu per hour, using one (1) baghouse for particulate matter (PM) emissions control, and exhausting through one (1) stack (S/V ID BH-1); and

The condition D.1.5 is amended as follows:

D.1.5 Sulfur Dioxide (SO₂) [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 120.0 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% when using distillate oil **or on-spec recycled blended fuel oil**.

The condition D.1.6 is amended as follows:

D.1.6 Fuel Oil Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the following limit shall apply:

- (a) the input of ~~No. 4 distillate~~ fuel oil (**either virgin or recycled**) to the 120.0 million Btu per hour burner for the aggregate dryer shall be limited, to 2,615,638 U.S. gallons per twelve (12) consecutive months, rolled on a monthly basis.
- (b) The total for each month shall not exceed the difference between the annual usage limit minus the sum of actual usage from the previous eleven (11) months.
- (c) During the first twelve (12) months of operation under this permit, the input of ~~No. 4 distillate~~ fuel oil (**either virgin or recycled**) shall be limited such that the total gallons divided by the accumulated months of operation shall not exceed 217,970 U.S. gallons per month.

The condition D.1.9 is amended as follows:

D.1.9 Testing Requirements [326 IAC 2-8-5(1)]

During the period between 12 and 36 months after issuance of this permit, the Permittee shall perform PM and PM-10 testing **for the worst case fuel** utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, other states' protocols and requirements as long as those tests satisfy IDEM requirements for PM and PM-10 testing, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10.

The condition D.1.10 is amended as follows:

D.1.10 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the No.4 fuel oil **or on-spec recycled blended fuel oil** sulfur content does not exceed five-tenths percent (0.5%) by weight by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; **or**

The condition D.1.15 (a) (2) is amended as follows:

- (2) Actual No. 4 distillate fuel oil **or on-spec recycled blended fuel oil** usage per month since last compliance determination period and equivalent sulfur dioxide emissions;

The FESOP Quarterly Report form is amended as shown on the next page:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Freesen, Inc.
Initial Source Address: (Portable) Rogers Group Interstate Sand and Gravel Pit W. 650 South,
Williamsport, Indiana
Mailing Address: P.O. Box 350, Bluffs, Illinois 62621
FESOP No.: F171-9683-0052
Facility: Aggregate Dryer
Parameter: No. 4 Distillate fuel **or on-spec recycled blended fuel oil** usage
Limit: sulfur content of fuel not to exceed 0.5%; the input of ~~No. 4 distillate~~ fuel oil
(either virgin or recycled) shall be limited, to 2,615,638 U.S. gallons per twelve
(12) consecutive months, rolled on a monthly basis. During the first twelve (12)
months of operation under this permit, the input of ~~No. 4 distillate~~ fuel oil **(either
virgin or recycled)** shall be limited such that the total gallons divided by the
accumulated months of operation shall not exceed 217,970 U.S. gallons per
month.

YEAR: _____

Month	Sulfur Content of Fuel Oil (%)	Heat Content of Fuel Oil (Btu/gal)	No. 4 Distillate Fuel Oil Usage This Month (gal)	No. 4 Distillate Fuel Oil Usage Previous 11 Months (gal)	12 Month Total No. 4 Distillate Fuel Oil Usage (gal)

(Note - In the table above the term Fuel Oil covers both virgin and recycled fuel oil)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

2. The company has further requested to remove condition C.19 regarding submission of annual emission statements. This request is made because the source is limited to 100 tons per year emission for all criteria pollutant as a FESOP source.

The OAM, IDEM has determined that this change cannot be made because as part of the Federally Enforceable State Operating Permit, only PM-10 and not PM emissions are limited to less than 100 tons per year. As PM emissions from this source are above 100 tons per year threshold, the source will be required to submit annual emission statements.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Gurinder Saini, at (800) 451-6027, press 0 and ask for Gurinder Saini or extension 3-0203, or dial (317) 233-0203.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments

GS

cc: File - Warren County
U.S. EPA, Region V
Warren County Health Department
Air Compliance Section Inspector - Eric Courtright
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

OFFICE OF AIR MANAGEMENT

Freesen, Inc.

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F171-9683-05052	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: August 10, 1998
First Administrative Amendment AAF171-12842	Pages Affected: 5, 27-31, 36
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a portable hot drum mix asphalt plant.

Responsible Official: Richard Lyons
Initial Location: (Portable Plant) to be located at Rogers Group Interstate Sand and Gravel Pit, 3255 West Rt. 650 South, Williamsport, Indiana
Mailing Address: P.O. Box 350, Bluffs, Illinois 62621
SIC Code: 2951
Initial County Location: Warren
Initial County Status: Attainment for all criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD and Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This portable source consists of the following emission units and pollution control devices:

- (1) one (1) portable hot asphalt mixer and aggregate dryer, with a maximum capacity of 350 tons per hour, equipped with one (1) #4 fuel oil or on-spec recycled blended fuel oil (meeting specifications of #4 fuel oil) fired burner with a rated input of 120 million (MM) Btu per hour, using one (1) baghouse for particulate matter (PM) emissions control, and exhausting through one (1) stack (S/V ID BH-1); and
- (2) one (1) asphalt cement storage tank with a maximum capacity of 30,000 gallons.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This portable source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Two (2) No.2 fuel oil-fired asphalt storage tank heaters each rated at 1.374 mmBtu per hour, and each exhausting through one (1) stack;
- (2) one (1) No.4 distillate fuel oil storage tank with a maximum storage capacity of 10,000 gallons;
- (3) one (1) No.2 distillate fuel oil storage tank with a maximum storage capacity of 250 gallons;
- (4) three (3) prime tackcoat storage tanks each with a maximum storage capacity of 10,000 gallons;
- (5) replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (6) heat exchanger cleaner and repair;
- (7) process vessel degassing and cleaning to prepare for internal repairs;
- (8) paved and unpaved roads and parking lots with public access;
- (9) truck and conveyor transfer operations; and
- (10) aggregate stockpiles and vehicular trafficking.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (1) one (1) portable hot asphalt mixer and aggregate dryer, with a maximum capacity of 350 tons per hour, equipped with one (1) #4 fuel oil or on-spec recycled blended fuel oil (meeting specifications of #4 fuel oil) fired burner with a rated input of 120 million (MM) Btu per hour, using one (1) baghouse for particulate matter (PM) emissions control, and exhausting through one (1) stack (S/V ID BH-1); and
- (2) one (1) asphalt cement storage tank with a maximum capacity of 30,000 gallons.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter (PM) [326 IAC 12] [40 CFR 60.90, Subpart I]

Pursuant to 326 IAC 12, (40 CFR Part 60.90, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the particulate matter emissions from the mixing and drying operations shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf). This is equivalent to a particulate matter emission rate of 9.6 pounds per hour.

D.1.2 Particulate Matter (PM) [326 IAC 6-1-2] [326 IAC 6-1-7]

Pursuant to 326 IAC 6-1-2 (Particulate Emissions Limitations), this source is not permitted to operate in the following counties listed under 326 IAC 6-1-7: Dearborn, Dubois, Lake, Marion, Vigo, Wayne, Howard, Vanderburgh, Clark, and St. Joseph County.

D.1.3 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate mixing and drying operation shall not exceed 20.49 pounds per hour, including both filterable and condensable fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.4 Opacity [326 IAC 12] [40 CFR 60.90, Subpart I]

Pursuant to 326 IAC 12, (40 CFR Part 60.92, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the mixing and drying operations shall not discharge or cause the discharge into the atmosphere any gases which exhibit 20% opacity or greater.

D.1.5 Sulfur Dioxide (SO₂) [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 120.0 million Btu per hour burner for the aggregate dryer shall be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% when using distillate oil or on-spec recycled blended fuel oil.

D.1.6 Fuel Oil Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the following limit shall apply:

- (a) the input of fuel oil (either virgin or recycled) to the 120.0 million Btu per hour burner for the aggregate dryer shall be limited, to 2,615,638 U.S. gallons per twelve (12) consecutive months, rolled on a monthly basis.
 - (b) The total for each month shall not exceed the difference between the annual usage limit minus the sum of actual usage from the previous eleven (11) months.
 - (c) During the first twelve (12) months of operation under this permit, the input of fuel oil (either virgin or recycled) shall be limited such that the total gallons divided by the accumulated months of operation shall not exceed 217,970 U.S. gallons per month.
- Therefore, the requirements of 326 IAC 2-7 will not apply.

D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-5-2]

- (a) Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven percent (7%) of distillate by volume of emulsion for any paving application except:
- (1) penetrating prime coating;
 - (2) stockpile storage;
 - (3) application during the months of November, December, January, February, and March.
- (b) Cutback asphalt or asphalt emulsion containing oil distillate or other volatile organic compounds (VOC) other than liquid asphalt shall not be produced at this source without prior review and approval by OAM. Compliance with this part of this condition satisfies part (a) of this condition, but does not preclude the use of water based emulsifying agents in the production of cold mix asphalt.

D.1.8 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.9 Testing Requirements [326 IAC 2-8-5(1)]

During the period between 12 and 36 months after issuance of this permit, the Permittee shall perform PM and PM-10 testing for the worst case fuel utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, other states' protocols and requirements as long as those tests satisfy IDEM requirements for PM and PM-10 testing, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10.

D.1.10 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the No.4 fuel oil or on-spec recycled blended fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 120.0 MMBtu per hour burner for the aggregate dryer, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above

shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.11 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the aggregate dryer is in operation and exhausting to the outside atmosphere.

D.1.12 Visible Emissions Notations

- (a) Daily visible emission notations of the aggregate dryer baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.13 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the aggregate dryer, at least once daily when the aggregate dryer is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 10.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.14 Broken Bag or Failure Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.15 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.5 and D.1.6, the Permittee shall maintain records in accordance with (1) through (6) below.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual No. 4 distillate fuel oil or on-spec recycled blended fuel oil usage per month since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.1.12, the Permittee shall maintain records of daily visible emission notations of the aggregate dryer baghouse stack exhaust.
- (c) To document compliance with Condition D.1.13, the Permittee shall maintain the following records as specifically related to the baghouse:
- (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
 - (2) Documentation of all response steps implemented, per event .
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).

- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.6 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Freesen, Inc.
Initial Source Address: (Portable) Rogers Group Interstate Sand and Gravel Pit W. 650 South,
Williamsport, Indiana
Mailing Address: P.O. Box 350, Bluffs, Illinois 62621
FESOP No.: F171-9683-0052
Facility: Aggregate Dryer
Parameter: No. 4 Distillate fuel or on-spec recycled blended fuel oil usage
Limit: sulfur content of fuel not to exceed 0.5%; the input of fuel oil (either virgin or recycled) shall be limited, to 2,615,638 U.S. gallons per twelve (12) consecutive months, rolled on a monthly basis. During the first twelve (12) months of operation under this permit, the input of fuel oil (either virgin or recycled) shall be limited such that the total gallons divided by the accumulated months of operation shall not exceed 217,970 U.S. gallons per month.

YEAR: _____

Month	Sulfur Content of Fuel Oil (%)	Heat Content of Fuel Oil (Btu/gal)	Fuel Oil Usage This Month (gal)	Fuel Oil Usage Previous 11 Months (gal)	12 Month Total Fuel Oil Usage (gal)

(Note - In the table above the term Fuel Oil covers both virgin and recycled fuel oil)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____